



## Abstract

An energy conservation flywheel is utilizing variable moment of inertia and centrifugal forces to store kinetic energy. Flywheel is of a top shape (disk and a hollow shaft). Holes extend radially from the center of a disk. In these holes are placed sliding rods attached to an extension spring by cables, running thru hollow shaft, at one end while at other ends weights (steel spheres) are attached. Flywheel rotates in horizontal plane, held by roller bearings in a rigid frame. Flywheel rotates, after initial spin; centrifugal forces will cause weights to start moving outward hence increasing moment of inertia/decreasing a flywheel revolution. At the end of weights travel, an extension spring balances out and overcomes centrifugal forces thus pulls weights inward. Moment of inertia decreases, a flywheel rotation increases; weights centrifugal forces increase thus overcoming an extension spring force and sliding outward. Then continue to cycle for long time.